

## D6696

### 16×16 Professional Audio Processor



#### Description

This series of devices supports 16×16 analog channels with a high-quality 21-level preamplifier circuit and a DSP processing bus structure to deliver high-fidelity sound reproduction. It is widely applicable to large venues such as theaters, concert halls, remote video conferencing rooms, stadiums, churches, conference centers, and theme parks, meeting diverse sound reinforcement needs. The device is designed for simplicity in operation and features intelligent control functions.

#### Features

- 24-bit/48kHz sampling frequency, high-performance AD/DA converters, and a 40-bit floating-point DSP processor.
- High-precision input sensitivity adjustment with 21 levels, 3dB steps, and a maximum input gain of 60dB.
- Full-featured matrix mixing function, offering exceptional and clear sound, including EQ, GATE, COMP, LIMIT, AGC, and more.
- GPIO supports 8-channel scene switching for quick operation, with RS232 and RS485 central control commands.
- 60 scene presets with a user-friendly interface, supporting fast switching between Chinese and English.
- TCP/IP control protocol for PC connection, enabling web-based quick control and parameter adjustment.

#### Specifications

| Model              | D6696                            |
|--------------------|----------------------------------|
| Input/Output       | 16×16                            |
| Input/Output Type  | Analog                           |
| Signal Processor   | 40-bit floating-point DSP 400MHz |
| Bit Depth          | 24-bit                           |
| Sampling Frequency | 48kHz                            |

|                      |                          |
|----------------------|--------------------------|
| Input Impedance      | <10KΩ                    |
| Output Impedance     | 200Ω                     |
| A/D Dynamic Range    | 118dB                    |
| D/A Dynamic Range    | 118dB                    |
| Max Input Level      | +18dBu                   |
| Max Output Level     | +18dBu                   |
| Transmission Delay   | 4.1ms                    |
| Output Channel Delay | 0ms~1500ms (Step:0.02ms) |
| THD+N                | ≤0.005% (+4dBu 1kHz)     |
| Frequency Response   | 20Hz~20kHz ±0.3dB        |
| CMRR                 | ≥55dB                    |
| Crosstalk            | ≤-100dB                  |
| SNR                  | ≥111dB (20~20KHz)        |
| Dynamic Range        | ≥111dB (20~20KHz)        |
| Noise Floor          | ≤-93dBu (20~20KHz)       |
| Connection Type      | TCP/IP, RS232, RS485     |
| Preset               | 60                       |
| Size                 | 482×253×44mm             |
| Net/Gross Weight     | 3.3kg / 3.8kg            |